

Appl. No.: 09/966,987  
Amdt. dated September 28, 2001  
Reply to Office action of August 24, 2004

Amendments to the Specification:

Please amend the paragraph beginning on page 10, line 4 as follows:

The apparatus of the present invention is a hole probe 10 and one embodiment of the hole probe apparatus of the present invention is depicted in Figure 1. The hole probe apparatus 10 may include an electro-optic portion 12, a display portion 14, a mechanical drive portion 16, and a nose assembly portion 18. The electro-optic portion 12 of the hole probe apparatus 10 typically contains a fiber optic control module 20 and a processor 24, as depicted in the exploded view of the hole probe apparatus 10 in Figure 2 and as described in more detail below. Figure 1 and Figure 2 show the display portion 14 that includes a screen 26 and function buttons 28. The mechanical drive portion 16 of one embodiment contains a handle 30, an actuator, such as a trigger 32, a rack and pinion gear train 34, a linear bearing 35, a return spring 36, a home switch 37, and a position feedback device 38, as depicted in the exploded view of the hole probe apparatus 10 in Figure 2 and as described in more detail below. The exploded view of the hole probe apparatus 10 in Figure 2 and the magnified view of the nose assembly 18 in Figure 3 illustrate that the nose assembly ~~portion~~ portion 18 generally contains a probe tip 40, at least one optical fiber 41, a spring 42, a nose 44, a retainer ring 46, and a housing 47.

Please amend the paragraph that begins on page 13, line 19 as follows:

The exploded view of the hole probe apparatus 10 in Figure 2 and the magnified view of the nose assembly 18 in Figure 3 illustrate that the nose assembly ~~portion~~ portion 18 of one embodiment of the present invention contains the probe tip 40, at least one optical fiber 41, the spring 42, the nose 44, the retainer ring 46, and the housing 47. The nose 44 has a frusto conical shaped section that tapers radially inward in a forward direction and a rearward extending member. The taper angle of the nose 44 matches the angle of the countersink of the hole to be probed. The rearward extending member may have two sections, the first section disposed rearward of the frusto conical section and the second section disposed rearward of the first section. The second section may have a smaller width than the first section such that a step is created in the extending member. The spring 42 may surround the entire extending member or may surround only the

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second section of the extending member by abutting the step in the extending member. The housing 47 surrounds the extending member of the nose 44 and the spring 42. The forward facing side of the housing 47 has an opening through which the frusto conical section of the nose 44 extends. The retainer ring 46 may be attached to the forward facing side of the housing 47 around the opening and partially covering the opening to prevent the nose 44 and the spring 42 from being removed from the housing 47. The spring 42 surrounding at least part of the extending member of the nose 44 is partially compressed such that the nose 44 is gently pressed against the retainer ring 46.